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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,382	07/24/2003	Andre Heinrich	09280-US	9772

7590 05/27/2005

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EXAMINER

RAEVIS, ROBERT R

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,382

Applicant(s)

HEINRICH ET AL.

Examiner

Robert R. Raevis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7-24-03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, "especially..two points in time" (lines 3-4) is indefinite. Where does the written specification make reference to a "ratio of fractions" (line 8)? Where in the written specification is this "ration of fractions" related to a "peak" (line 9)? Are the "at least two frequency bands" (lines 8-9) related to the "1st and 2nd frequency band" (of p. 5, line 6 from last) and Figure 4b? Regarding limitation (b) on lines 8-10, what does "its peak" refer to in the phrase "determiningmeasured signal" (lines 8-9)? In particular, is limitation (b) limited to "determining" "its peak"? If so, how is a peak determined? What characteristic of the peak is determined, or is it just determined if a peak is there?

As to claim 2, how can "equal to zero" (line 7) be correct? If the "duration" (line 6) is "zero", no "pre-selected interval" (line 5) can literally occur. Which of the two step "a"s does "step (a)" (line 8) refer back to? What does the "stipulated" (line 4 from last) refer to in the written specification? Which of the two step "b"s does "step (b)" (line 4 from bottom) relate back to?

As to claims 3,4,"said analysis of said characteristic parameter" lacks antecedent basis.

As to claims 1 and 2, what do the terms in those claims refer to in the written specification? Both terms and phrases in the claims do not match those of the written specification, and thus it is not possible to determine which of the

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many embodiments in the written specification are related to claims 1 and 2.

Each and every term/phrase in the claims must be readily identified in the written specification so that there may be a proper understanding of the claimed subject matter. This will likely require extensively amending either the claims, written specification, or both.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Statements in view of Thomas et al.

Applicant describes (page 1 of the written specification) that it is desirable to determine blade sharpness of choppers, but does not provide the method claimed.

Thomas et al teach (ABSTRACT, Figure 4, col. 1, lines 5-17) use of a sensors 21,23 to monitor oscillations to determine sharpness of a cutting tool. The measured values are of both low frequency (Block 67) (i.e. a first frequency band) and high frequency (Block 57) (i.e. a second frequency band), a ratio of which is determined to provide a "reference" (col. 7, line 55), so that subsequently determined values of that same ratio may be compared ((Block 68) with the reference to determine excessive wear (Block 69).

As to claims 1,3-5, it would have been obvious to employ Thomas's method to test for the condition of wear of Applicant's blades because Thomas provides for a

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method to automatically detect cutting tool wear with use of application of a sensor and software.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kakino makes reference to acoustic emission detecting for cutter testers, in Figure 1.

Darrel et al test vibrations at different frequencies (Blocks 22,21) for a cutting tool tester, in Figure 3.

Hamidieh et al refer to application of use of a "plurality of frequency bands" (ABSTRACT) to test a cutting tool.

Claim 2 could not be deemed to contain allowable subject matter in view of excessive 112(2) issues. All claims must be reexamined in light of 35 USC 102/103 upon Applicant amending the claims to overcome outstanding 35 USC 112(2) issues.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 6:30am to 3:30pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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ROZUP

RAWIS -